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February 12, 2019

Ms. Natalie Creed Hazardous Waste Unit Manager Idaho Department of Environmental Quality 1410 North Hilton Boise, ID 83706

RE: US Ecology Idaho (USEI) Site B - IDD073114654

Response to Temporary Authorization Outstanding Issues

Interim Phase Direct Disposal Operations

Dear Ms. Creed:

USEI has addressed the additional concerns attached to IDEQ's Temporary Authorization response, dated February 7, 2019. Included with this letter are the Attachment A Response, updated copies of Permit Attachment 6 and updated Appendix D – WAP Activities During Interim Phase at USEI.

If you have any questions regarding the content of this letter or require additional information, please call me or Rebecca Hogaboam at (208) 834-2275.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Regards,

K

Jason Evens General Manager

Enclosures

cc:

Barbara McCullough, EPA Region 10 (Electronic Copy)

Lon Stewart, IDEQ

Andrew Marshall, USE (Electronic Copy)

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#### USEI Response to Attachment A

Please supply title pages for Appendixes B and C.
 USEI Response: Title pages are included with this submission.

**DEQ Comment:** Accepted.

2. Explain why USEI plans to receive deliveries of reagent when the facility will only be taking waste that is limited to direct disposal without treatment.

**USEI Response:** USEI has requested to receive deliveries of reagent since there is a long lead time needed for receipt of some of the reagents used on site. USEI would need to order reagents prior to treatment capability being restored.

DEQ Comment: Accepted.

3. The facility must clarify the source of wastes during this TA. The request indicates the TA is necessary to receive wastes from the Rail Transfer Facility while elsewhere the text indicates that wastes can be accepted from any source for direct disposal during the time of the Temporary Authorization. Clarify and add more explanation if the intention is to receive bulk loads from other sources. Will bulk liquids be received from the RTF or from other sources too?

USEI Response: Bulk loads from sources other than the RTF would potentially be received during this time. These loads of waste would also be non-hazardous or would meet applicable Land Disposal Restrictions (LDR). Trucks of bulk material for direct disposal would come over the road from generator locations. Bulk liquids could potentially be received from the RTF and/or over-the-road trucks from other customers/transporters. All loads of bulk liquid would be either non-hazardous or would meet applicable LDR. All material would be subject to the same stringent pre-approval process as well as visual and fingerprint inspection.

DEO Comment: Accepted.

# 4. Appendix D: Waste Analysis Plan (WAP) Activities During the Interim Phase at US Ecology Idaho (USEI)

a. Section C.5.1 of the WAP includes cyanide and sulfide screens in the fingerprint analysis to check for gas generation. Section C.5.1 indicates the wastes will not be screened if the waste is not water soluble. Referring to the Test methods in Table C-7, for cyanide and sulfide screens, the tests are not limited to water soluble wastes. The test wets the sample with acid and uses test strips to identify gases being liberated. Water solubility has no bearing upon whether the screening should be performed. The Interim Phase WAP needs to be modified to include cyanide and sulfide screens as part of the fingerprint analysis. USEI Response: Since all material is non-hazardous or meets LDR, these analyses are not required at this time.

**DEO Comment:** Section C.5.1 of the WAP states, "The Fingerprint Analysis is a basic screening procedure performed to provide general waste identification and associated waste confirmation that the waste received is the same waste that was characterized during the pre-acceptance process." The cyanide and sulfide screen tests are just as important as the paint filter and flammability screens on certain types of wastes. A review of the Waste Profile Form would give clues (e.g., generator's business, process generating waste, odors, and material constituents) as to the potential for the waste potentially or previously containing cyanides and sulfides. Just as 100% of all wastes do not have every fingerprint analysis performed, the same would be true for cyanide and sulfide screens but if the waste had or has the potential for such compounds, the cyanide and sulfide screens will be performed at the statistical frequency as outlined in Section C.7.1.2 Bulk Receipt. The screens become a quick check to alert the facility the incoming waste may not meet LDR standards, even though the waste was certified by the generator. The interim phase WAP is modified to include cyanide and sulfide screens as part of the fingerprint analysis for wastes that have the potential for cyanide and sulfate. USEI Response 2: USEI will include the cyanide and sulfide screens as part of the fingerprinting process for incoming wastes that have a potential for such compounds to be present.

b. Fine waste determination is also a fingerprint analysis in Section C.5.1 of the WAP and needs to be included as a recognized screening for inbound interim phase waste. **USEI Response:** The Fine Waste Determination is used only for materials that would be received for treatment prior to direct landfill. Since material is not being received for treatment at this time, the Fine Waste Determination is not required. **DEQ Comment:** See DEQ Comment to 4.a. above, the same reasoning applies to fine waste determination to be included in the fingerprint analysis. If there is a potential for fines to be present, then a fine waste determination will be performed on incoming wastes prior to disposal. The interim phase WAP is modified to include fine waste determination as part of the fingerprint analysis when the potential for high volumes of fines is present. **USEI Response 2:** The fine waste determination was added to the RCRA Part B Permit Renewal Application as a fingerprint parameter in 2015, following addition of the requirement to the Air Permit to Construct in 2013. The fine waste determination is used only for wastes that will be treated within one of the permitted treatment units and is used only to make a determination of whether wastes must be treated within the Stabilization Building with the Air Pollution Control system operating, or whether they may be treated at the Outdoor Stabilization Facility. The determination has never been used for wastes meeting LDR that will be direct landfilled. USEI considers the required visual inspection to be sufficient for determining whether a waste may have a potential to cause excessive dust issues during unloading. If a waste has this potential, USEI will use the same measures that have been used in the past for unloading of these types of wastes. These

measures include unloading the waste slowly so that excessive dust is not released during the process and covering the material with inert, non-dusty material immediately after unloading. When a waste for direct landfill is determined by visual inspection to be excessively dusty or fine, it will be noted in the operating record that the waste is dusty/fine and is to be covered immediately. Documentation of the fine/dusty waste coverage will be included on the WO form.

c. Bulk solids shall be sampled at the rate described in Section C.7.1.2, not Section C.7.1.3 as described in the last paragraph of the Incoming Waste Shipment Procedures, make an appropriate change.

**USEI Response:** The document has been updated and a revised copy has been provided with this submission.

**DEQ Comment:** Accepted.

d. The Supplemental Analysis section needs to be expanded to state that if supplemental analysis is needed, the waste will not be deposited in the landfill or Evaporation Pond until the supplemental analysis results are obtained.

**USEI Response:** The document has been updated and a revised copy has been provided with this submission.

**DEQ Comment:** USEI's comments were based on a Draft response to the application. The final version ended comment 4.d. with "until the supplemental analysis results are obtained that satisfy the acceptance criteria." Please add the additional language "that satisfy the acceptance criteria" to the last sentence.

USEI Response 2: USEI has added the requested language to the document.

5. Attachment 3, Drawing PRMI-T10: The print within the "Legend" is too small to be legible on the paper copy and too blurred when expanded on the electronic version, Supply a version that can be read easily without the use of higher magnification. The Drawing contains a large amount of data and only shows a changed version, provide a redline version, hand drawn circled items showing the changes made to the drawing would be sufficient. Further, the title of the Drawing needs to be changed by removing the word "Typical." This is not a "typical" situation, this is a drawing showing the location of specific communication and emergency response equipment on location.

USEI Response: An updated, larger scale drawing, which includes the requested changes has been included with this submission.

DEQ Comment: Accepted.

6. Section F.3.a(1): The air horn boxes shall be checked more frequently than monthly. The sirens and strobes have been removed from the list of emergency equipment, leaving only the air horns as a method of area wide notification to all employees. The air horns are a new system that can be easily tampered with and have no discernable method to

know if the units are charged and ready for use. To fit existing inspection schedules, the air horn boxes shall be inspected daily.

**USEI Response:** Daily inspection of the air horn stations is included in Sections F.3.a and F.3.a.(1). Daily inspections of the air horn stations will be tracked on the included log.

DEQ Comment: Accepted.

7. Section F.4.a.(2): All five paragraphs of the section give the impression that bulk liquids may be commingled and stored in tanks prior to being sent to the Evaporation Pond. The temporary authorization requests for wastes to go direct to landfill and what appears to be bulk liquids going direct to the Evaporation Pond. Rework Section F.4.a.(2) to eliminate the language referring to multiple liquids, batch operations or tank storage. Modify the section to state bulk liquids will be discharged into the Evaporation Pond after the required compatibility testing with pond water.

**USEI Response:** Section F.4.a.(2) has been updated to reflect that any bulk liquid waste received will be discharged only after compatibility testing. The section has also been updated to reflect that wastes will be discharged only into the surface impoundments during the interim and not into the facility RCRA tanks.

**DEQ Comment:** This paragraph appears to be discussing the unloading of offsite waste bulk liquids. Tanks will not be used for offsite bulk liquids. If the assumption is correct, remove the words "tanks or" from the first paragraph, otherwise provide clarification. The fourth paragraph, fourth sentence needs to have the words "stored and/or treated" changed to "managed" as no treatment is being performed on site during the interim phase of operation.

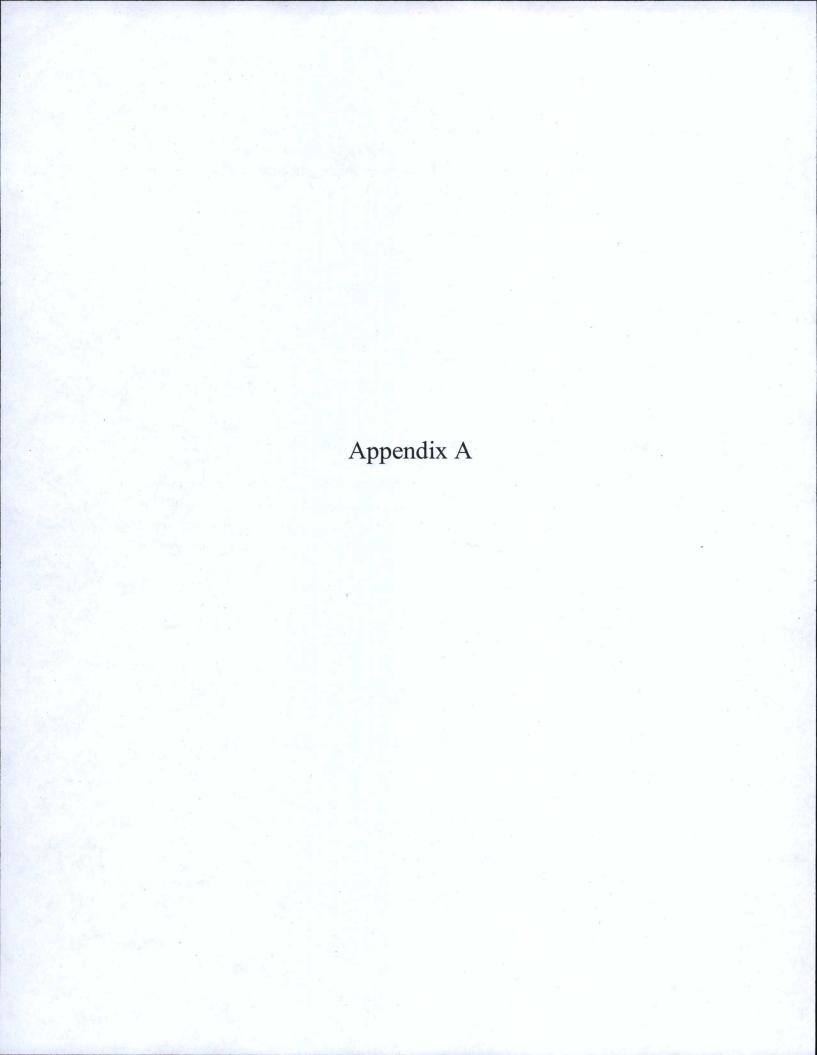
USEI Response 2: USEI has made the suggested changes to Attachment 6.

8. Section F.4.a.(3): The Facility is not authorized to accept containerized waste during the interim operational time period. The section needs to be modified to remove language regarding unloading incoming waste. DEQ recognizes that containers are onsite and may need to be moved and unloaded onsite requiring the use of specified hazard preventions. Modify the section to remove language referring to unloading incoming containerized waste.

**USEI Response:** The section has been modified to remove language regarding movement of incoming containerized waste.

DEQ Comment: Acceptable.

9. Section F.5.b last paragraph: The use of Group E materials, as defined in Table C-9 of the WAP appears to be inappropriate for a fill material to separate incompatibles. Group E contains a list of flammable and combustible materials and reactive metals. Group E materials were being processed at the time of the November 17<sup>th</sup> incident. Using Group E materials as a filler to separate potentially incompatible materials by 3 feet does not



# Attachment 6 Hazards Prevention Plan Table of Contents

F.4 Preventive Procedures, Structures, and Equipment	3 <del>2</del>
F.4.a Unloading Operations	32
F.4.a.(1) Bulk Solids Unloading	
F.4.a.(2) Bulk Liquid Unloading	3
F.4.a.(3) Containerized Waste Unloading Procedures	4
F.4.a.(4) [Reserved]	
F.4.a.(5) [Reserved]	4
F.4.b Run-Off	54
F.4.c Water Supplies	5
F.4.d Equipment and Power Failure	5
F.4.e Personal Protection Equipment	5
F.4.f Decontamination Procedures	6
F.5 Prevention of Reaction of Ignitable, Reactive, and Incompatible Wastes	6
F.5.a Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Waste	6
F.5.b General Precautions for Handling Ignitable or Reactive Waste and Mixing of Incompatible	le Waste 7
F.5.c Management of Ignitable or Reactive Wastes in Containers	87
F.5.d Management of Incompatible Wastes in Containers	87
F.5.e Management of Ignitable or Reactive Wastes in Tank Systems	8
F.5.f Management of Incompatible Waste in Tank Systems	8
F.5.g Management of Ignitable or Reactive Wastes Placed in Waste Piles	8
F.5.h Management of Incompatible Wastes Placed in Waste Piles	98
F.5.i Management of Ignitable or Reactive Wastes Placed in Surface Impoundments	98
F.5.j Management of Incompatible Wastes Placed in Surface Impoundments	98
F.5.k Management of Ignitable or Reactive Wastes Placed in Landfills	9
F.5.I Management of Incompatible Wastes Placed in Landfills	9
F.5.m Management of Ignitable or Reactive Wastes Placed in Land Treatment Units	9

F.5.n Management of Incompatible Wastes Placed in Land Treatment Units	9
F.4 Preventive Procedures, Structures, and Equipment	
F.4.a Unloading Operations	2
F.4.a.(1) Bulk Solids Unloading	
F.4.a.(2) Bulk Liquid Unloading	
F.4.a.(3) Containerized Waste Unloading Procedures	
F.4.a.(4) Unloading at Stabilization Facility	3
F.4.a.(5) Unloading at Containment Building	3
F.4.b Run-Off	4
F.4.c Water Supplies	4
F.4.d Equipment and Power Failure	4
F.4.e Personal Protection Equipment	4
F.4.f Decontamination Procedures	5
E. E. Durantian of Departies of Invitable Departies and Incompatible Wester	-
F.5 Prevention of Reaction of Ignitable, Reactive, and Incompatible Wastes	
F.5.a Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Waste	5
F.5.b General Precautions for Handling Ignitable or Reactive Waste and Mixing of Incompatible	Waste 6
F.5.c Management of Ignitable or Reactive Wastes in Containers	6
F.5.d Management of Incompatible Wastes in Containers	6
F.5.0 Wanagement of incompatible wastes in Containers	
F.5.e Management of Ignitable or Reactive Wastes in Tank Systems	7
F.5.f Management of Incompatible Waste in Tank Systems	7
F.5.g Management of Ignitable or Reactive Wastes Placed in Waste Piles	7
E. S. I. Management of Incompatible Wester Blood in Wester Biles	7
F.5.h Management of Incompatible Wastes Placed in Waste Piles	/
F.5.i Management of Ignitable or Reactive Wastes Placed in Surface Impoundments	7
F.5.; Management of Incompatible Wastes Placed in Surface Impoundments	7
F.5.; Warragement of incompatible wastes Placed in Surface impoundments	
F.5.k Management of Ignitable or Reactive Wastes Placed in Landfills	8
F.5.I Management of Incompatible Wastes Placed in Landfills	8
1.0.1 Managomont of moompatible Practice Fladed in Earland	
F.5.m Management of Ignitable or Reactive Wastes Placed in Land Treatment Units	8
F.5.n Management of Incompatible Wastes Placed in Land Treatment Units	8
Total management of informpatible fraction indeed in Edital Fraction of into	

# F.4 Preventive Procedures, Structures, and Equipment

## F.4.a Unloading Operations

In accordance with IDAPA 58.01.05.012 (40 CFR §270.14(b)(8)(i)), unloading procedures for waste shipments utilize safe and environmentally-sound methods to process and dispose of waste material. The facility handles both containerized and bulk shipments of solid and liquid wastes. Therefore, each type of waste shipment is addressed separately.

#### F.4.a.(1) Bulk Solids Unloading

All bulk solids unloading operations are performed under the direction of facility personnel. All personnel involved in unloading operations are trained in the handling of hazardous materials and are required to wear appropriate safety equipment.

Upon entering the site, transportation vehicles normally proceed to the Truck Scale and then to the staging area. After inspection and acceptance, each vehicle is directed to its designated unloading area. When a transportation vehicle arrives at the unloading area, an employee typically assists the driver in positioning of the vehicle. This allows control of vehicle movement by facility personnel while the vehicle is on-site. Prior to unloading, wind conditions and waste material type are assessed to determine if dust control measures are appropriate. Bulk solids are unloaded at the appropriate waste management area.

#### F.4.a.(2) Bulk Liquid Unloading

After inspection, <u>compatibility testing</u>, and acceptance, each vehicle is directed to <u>its-the</u> designated unloading area at <u>either</u> the <u>tank storage</u>, surface impoundment, <u>or treatment unit</u>. Prior to off-loading of wastes into <u>tanks</u>, surface impoundments, <u>or treatment systems</u>, the compatibility of the new waste is determined in accordance with the procedures in the WAP.

All bulk unloading operations are performed under the direction of facility personnel. All personnel involved with unloading of bulk liquid wastes don the proper PPE prior to the off-loading of waste material. Each transportation vehicle is positioned in a stable manner prior to unloading. It is then grounded to reduce the possibility of static electrical discharge. For bulk liquid truck unloading operations, all hose and piping connections are secured and checked prior to unloading. If valves are involved in the unloading process, they are checked for proper operation. After all connections and valves are checked for proper operation and waste unloading begins. All connections between the transportation vehicle and the facility systems are monitored during the unloading process for any evidence of leakage or other possible problems.

When a waste material is to be stored in one of the tanks, the tank identification, quantity, and work order number of the waste is recorded in the operating records. When a waste material is transferred to the surface impoundmenta treatment/disposal system, the quantity and work order number of the waste is recorded in the operating records.

Several control procedures are utilized to provide for the proper bulk handling of multiple liquid materials. By following the WAP, established procedures are used to determine the chemical and physical characteristics of each waste so adequate information has been obtained for the proper and safe management of the waste. Individual waste streams are accepted and processed for management in specified units. These units are designated to service specific wastes so only compatible wastes are stored and/or treatedmanaged in the same unit. This batch method of operation minimizes the potential for mixing of incompatible waste materials. Batch operation also facilitates the safe operation of treatment units. Prior to introduction of a different waste compatibility type, compatibility is checked in accordance with Section C.3.26.5 of the facility WAP.

Liquid waste shipments that are not compatible with materials of construction of the management unit or with the materials currently stored in the management unit are evaluated for storage in a different unit at the facility. Wastes that are not compatible and are not suitable to be managed at another facility in the unit are rejected and either returned to the generator or shipped to an alternate facility.

#### F.4.a.(3) Containerized Waste Unloading Procedures

Upon arrival at When multiple numbers of drums are moved, they are placed on site transportation vehicles. USEI7 container transportation vehicles normally proceed to the Truck Scale and then to a staging area for preparation for unloading. Each vehicle then-proceeds to its designated unloading area under the direction of site personnel. Facility personnel in the unloading area are instructed with respect to proper PPE for use in handling the incoming waste material based on the Waste Profile Form (WPF) or Work Order as appropriate. All handling of containers at the facility is performed with the appropriate equipment. When individual drums are transported from one area of the facility to another, a bobcat, drum dolly, or other appropriate piece of drum handling equipment is utilized. When multiple drums on wooden pallets are moved or staged in another area, a front-end loader, forklift or other appropriate equipment is used.

If an incoming transportation vehicle is carrying containerized waste that is to be placed into a CMU, the vehicle proceeds under the direction of facility personnel. The vehicle is positioned on a stable unloading area and all containers are removed from the vehicle with appropriate container handling equipment.

Each incoming container is visually inspected for integrity and to verify that labeling and marking are complete with respect to container identity. Containers that do not conform to these guidelines are designated for further processing and identification and/or repackaging, if necessary. Containers that cannot be identified or whose discrepancies cannot be resolved are either re-characterized, returned to the generator, or sent to an alternate facility.

Upon acceptance at<u>movement to</u> the staging/storage facility, individual containers may be placed on pallets, <u>as needed</u>. Prior to initiating work in the storage area, all personnel don the appropriate PPE. If the material is ignitable or reactive, appropriate precautions are taken as detailed in paragraph F.5.

#### F.4.a.(4) Unloading at Stabilization Facility[Reserved]

Waste determined to be suitable for stabilization may be forwarded directly to the Stabilization Facility. Laboratory stabilization testing is performed in accordance with the facility WAP. During this analysis and testing, those wastes found to be incompatible or detrimentally reactive with the stabilization treatment process are identified for further segregated handling and/or treatment. Each waste to be stabilized is evaluated in accordance with the facility WAP to evaluate treatability and handling requirements. After the determination of acceptability, the waste transport vehicle is directed by facility personnel to the proper unloading location.

Procedures set forth in paragraphs F.4.a.(1) and F.4.a.(2) are also followed when the waste arrives at the Stabilization Facility.

#### F.4.a.(5) Unloading at Containment Building[Reserved]

Incoming wastes are evaluated for compatibility with existing waste in the sort floors or mixing bins in accordance with the procedures of the facility WAP. If necessary, the laboratory performs a compatibility test (in accordance with the WAP) prior to waste mixing.

General procedures for unloading bulk solids, as described in paragraph F.4.a.(1), are followed in these areas. General procedures for unloading bulk liquids, as described in paragraph F.4.a.(2), are followed in the Containment Building . Containment Building components and systems are in place to prevent fugitive emissions during unloading operations as described in Section D.

#### F.4.b Run-Off

Site drainage and run-off controls are designed to convey and control rainfall from a 25-year, 24-hour precipitation event. Active waste disposal, storage, and treatment operations are segregated from stormwater by a series of berms, interceptor channels, engineered grades, and collection ponds.

Rainwater from within the perimeter road is impounded or directed to Collection Pond #1 or 3 by interceptor channels and engineered grades.

Rainwater from outside the perimeter road is directed off-site by grade, interceptor channels, and berming. The perimeter road berms generally prevent run-on to the facility.

Appendix D.4.7 contains further discussion on run-on/run-off control.

## F.4.c Water Supplies

To the best of USEI's knowledge, there are no domestic groundwater drinking water sources within 3,000 feet of the facility. The run-on and run-off control systems and the waste handling operations have been designed to prevent the contamination of either domestic groundwater drinking supplies or surface-water supplies. All treatment and disposal activities take place in areas that are sloped and graded to prevent uncontaminated off-site water from entering the site, as well as to prevent run-off from leaving the facility.

## F.4.d Equipment and Power Failure

In the event of a power outage, certain site processes are shut down. However, operations which do not require electrical power can usually continue unimpeded. Portable lighting is used, if necessary, to provide safe working conditions. Mobile radios are battery powered to provide uninterrupted communications. Radios are switched to Channel 2 or TA (for radios with a keypad) if the power is interrupted or the radio transponder becomes inoperable for some other reason. All of the facility emergency evacuation alarm systems, except the CD siren, are battery operated and do not depend on normal electrical service. Air horns for emergency signaling are also available in the event of a facility evacuation. power outage.

Ventilation systems in the Containment Building (Debris & Stabilization portions) are required to be in operation for certain waste (e.g., fine waste) management activities. In the Containment Building, the size reduction system (e.g., crusher, etc.), sort floors, and general building ventilation are serviced by separate ventilation systems. Therefore, failure of one system does not affect the operations in other areas. If all ventilation is off-line and an emergency situation occurs, then procedures in the Contingency Plan should be followed as applicable. Functionality of the ventilation system does not typically require implementation of the Contingency Plan if there is not release or threat of a release to human health or the environment.

# F.4.e Personal Protection Equipment

Personal protective equipment (PPE) is issued to individual employees to provide protection beyond that afforded by the engineered safety controls described throughout this <u>d</u>Document. This PPE may include the following:

- Respirator Protection
- Foot Protection
- Head Protection
- Eye Protection
- Hand Protection
- · Coveralls, Tyvek, and chemical resistant outer coverings

Facility personnel are trained in the appropriate use of PPE for each individual working area and condition. Special requirements for specific waste streams are designated by the Health & Safety Manager or are listed on the WPF and/or the Work Order as discussed in applicable sections of the facility WAP. Facility personnel are fit tested for respirators and instructed regarding the use of applicable safety equipment. If an employee notices a defect, it is their responsibility to request replacement of the defective equipment. If any employee determines a particular task does not comply with safe operating practices, it is their responsibility to notify their supervisor of the task in question. To facilitate this process, all employees are trained in the safe operating practices to be used in handling hazardous materials.

#### F.4.f Decontamination Procedures

A vehicle wash station is provided for washing/decontaminating equipment. This unit is also used to spray vehicles that traverse the landfill or other designated waste handling areas. This system is used to avoid tracking material off-site.

Personnel are instructed to clean waste handling equipment in designated areas prior to exiting designated portions of the facility.

A two-step decontamination system is utilized in the Containment Building to prevent the spreading of waste to other locations. An initial gross decontamination of personnel and equipment is conducted inside the Containment Building. If necessary, further decontamination of personnel and equipment are accomplished at the boot wash area and the vehicle wash station, respectively.

# F.5 Prevention of Reaction of Ignitable, Reactive, and Incompatible Wastes

The processing, storage, treatment, and disposal of ignitable, reactive and incompatible wastes pose various handling problems. USEI makes every effort to prevent any reaction involving ignitable and reactive waste and to minimize the opportunities for the mixing of incompatible wastes.

# F.5.a Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Waste

In accordance with IDAPA 58.01.05.012 and 58.01.05.008 and [40 CFR §§270.14(b)(9) and 264.17], and prior to handling ignitable material, USEI makes every effort to eliminate any potential situation which could cause an ignition of reactive or ignitable waste.

Prior to handling any reactive or ignitable waste, personnel will survey the immediate work area for any sources of ignition, open flame, or any other potential problems which may lead to a possible uncontrolled event. These sources include, but are not limited to, open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks, spontaneous ignition and radiant heat. These sources are removed from the work area. If handling equipment is used, only equipment that is compatible with the material is used. Transportation vehicles are turned off and secured to prevent movement, and tankers are grounded to prevent static discharges. Each work station is equipped with the appropriate fire-fighting equipment to

handle minor incidents. Smoking is not permitted in any waste handling area. A "No Smoking" sign is clearly posted at the entrance of the active yard area. Personnel can contact the area supervisor by two-way radio or other means in the event of an uncontrolled event. These and other emergency equipment maintained on-site are described in detail in the Contingency Plan.

# F.5.b General Precautions for Handling Ignitable or Reactive Waste and Mixing of Incompatible Waste

Every effort is made to minimize the potential for adverse reactive situations at the facility. Incompatible waste categories are handled separately at a given unit/sub-unit. All materials handling and processing equipment are decontaminated, as necessary, following activities with each waste category. Decontamination procedures for each change of waste category handling are determined by operations supervisors. Incompatible wastes are segregated by compatibility group via physical separation (barriers, berms, or dikes). Batch treatment techniques for individual categories of wastes (one compatibility group at a time) are utilized to minimize the adverse effects that may result from processing incompatible, reactive, or ignitable waste streams. Interim Processing Loads in the landfill will be inspected for proper cover, containment, marking, time constraints, and waste limitations as described in Section D.6.t.(2)(d).

Incompatible wastes are not stored together in containers or placed in contact with each other in surface impoundments or landfills at the facility. Wastes are tested or evaluated using the waste characterization/acceptance process for compatibility (as described in the WAP) prior to acceptance of the material at the facility. Individual waste shipments with uncertain properties are sampled and tested for compatibility prior to contact with other wastes or equipment. EPA-600/2-80-076, "A Method for Determining the Compatibility of Hazardous Wastes," was used as a guideline in developing compatibility categories for the management and processing of hazardous wastes. The criteria used for developing these categories were established to avoid producing a potentially dangerous situation. Hence, wastes are segregated from other incompatible wastes that, when contacted, could result in an adverse reaction, including any of the following:

- Generation of extreme heat or pressure, fire or explosions, or violent reactions.
- Production of uncontrolled flammable fumes, dusts or gases in sufficient quantities to threaten human health or the environment.
- Production of uncontrollable flammable fumes or gases in sufficient quantities to pose a risk of fire or explosion.
- Damage to the structural integrity of the device or facility.
- Creation of a threat to human health or the environment.

Segregation of potentially incompatible wastes in the landfill is facilitated by facility review of each waste stream (per requirements of the facility WAP) and utilization of the Work Order. When wastes are received and fingerprinted, the chemist will note on the Work Order any considerations of incompatibility. Conditions of incompatibility are not a concern where wastes have been treated to meet LDR standards. These wastes are in a physical state in which no adverse reactions will occur when the material is placed into the landfill. However, USEI also receives non-regulated materials for direct disposal (i.e. solid corrosives) that may be incompatible. To meet the requirements of 40 CFR §264.17(b) within the landfill cells, materials that may pose a potential for adverse reactions are segregated within separate subcells within the landfill. To create the subcell, any potentially incompatible materials are placed at least three (3) feet away from other materials. The space between materials is then filled with Group E material or clean fill. Group E or clean fill is packed around each container to create a totally separate and segregated area for these wastes within the landfill cell. If Group E material is used as fill material it must be inert and non-hazardous soil meeting LDR. Confirmation screening will be performed to verify that the fill soil is not flammable, combustible, or reactive prior to use as fill.

## F.5.c Management of Ignitable or Reactive Wastes in Containers

Prior to acceptance of any wastes, USEI uses the management system described in the facility WAP to determine the status for acceptance or rejection or acceptance of materials for disposal on-site. This system is designed to provide USEI the necessary precautions to avoid accepting ignitable, reactive, or incompatible wastes.

Any ignitable or reactive wastes are stored in segregated areas and comply with the requirements of 40 CFR §264.17(c). Paragraph D.1 of Section D identifies the locations of the waste management areas and processing areas. Per IDAPA 58.01.05.008 and 58.01.05.012 (40 CFR §§270.15(c) and 264.176), no ignitable wastes are stored or treated within 15 meters of the property line.

## F.5.d Management of Incompatible Wastes in Containers

As pursuant to IDAPA 58.01.05.008 and 58.01.05.012 (40 CFR §§264.177, 270.15(d)), tThe mixing of incompatible wastes in containers is not permitted unless §264.17(b) is complied withat USEI at this time. In accordance with the applicable section of the facility WAP, each waste entering the facility is tested and its destination noted on the Work Order. All containerized waste is separated from other incompatible waste via physical separation barriers (e.g., dikes, berms, or walls). Any waste container that is reused for future waste handling purposes is properly cleaned prior to reuse.

Bulk or containerized waste is-was previously stored within the Containment Building in designated areas. Segregation of incompatible wastes is-was maintained during storage and/or staging for processing. Only one compatibility group at a time is-was processed in each sort floor and mixing bin area. When waste spills occured, the spill material is-was collected, removed, and the area appropriately cleaned prior to any staging and/or processing of incompatible waste within theis area. No additional waste containers will be placed into storage at the Containment Building until the building is reconstructed.

# F.5.e Management of Ignitable or Reactive Wastes in Tank Systems

Not Applicable. The facility manages ignitable and reactive wastes per the requirements of Section C.6.4 of the facility WAP.

## F.5.f Management of Incompatible Waste in Tank Systems

Prior to the addition of a new <u>site-generated</u> waste stream into a tank, a waste to waste compatibility test is performed as required by the applicable sections of the facility WAP. If an incompatibility is determined, the new waste stream is not accepted into that tank as per IDAPA 58.01.05.012 and 58.01.05.008 (40 CFR §§264.199, 270.16(j)) unless §264.17(b) is complied with.

When an empty tank is designated to hold a compatibility group different than it previously held, appropriate cleaning and/or evaluation is performed before introducing any of the new compatibility group waste into the vessel. Cleaning procedures may include washing the inside of tanks and collecting the wash solution. These wash solutions may be treated as hazardous wastes if they exhibit a hazardous waste characteristic. The tanks are washed and/or emptied sufficiently so that when added to the tank, the new waste does not react with the waste wash water. Tests may be run on the wash water to verify adequate tank cleaning, to determine the degree of hazard and/or to determine disposition.

# F.5.g Management of Ignitable or Reactive Wastes Placed in Waste Piles

Not Applicable. The facility does not have any waste piles.

## F.5.h Management of Incompatible Wastes Placed in Waste Piles

Not Applicable. The facility does not have any waste piles.

# F.5.i Management of Ignitable or Reactive Wastes Placed in Surface Impoundments

Not Applicable. The facility does not accept ignitable or reactive wastes for management in surface impoundments.

# F.5.j Management of Incompatible Wastes Placed in Surface Impoundments

Material designated for disposal in a surface impoundment is tested for compatibility with the material already in the unit, as required by the facility WAP. If, through testing, the wastes in question are determined to be incompatible and would result in generation of heat or fire, production of toxic or flammable emissions, damage to the unit's structural integrity, or threaten human health or the environment, the new material is not introduced into the surface impoundment as per IDAPA 58.01.05.012 and 58.01.05.008 (40 CFR 270.17(h), §§ 264.229) unless §264.17(b) is complied with.

## F.5.k Management of Ignitable or Reactive Wastes Placed in Landfills

The facility does not accept air and highly water reactive wastes for direct placement in the landfill as described in the facility WAP. In accordance with the WAP and per IDAPA 58.01.05.012 and 58.01.05.008 (40 CFR §§270.21(f), 264.312), no ignitable or reactive hazardous waste is placed in a landfill unless it is treated or otherwise rendered non-ignitable or non-reactive. All incoming hazardous wastes are properly characterized and, if stabilization or treatment is required prior to placement in a landfill, special instructions are placed on the Work Order to clearly state the process to be followed.

## F.5.I Management of Incompatible Wastes Placed in Landfills

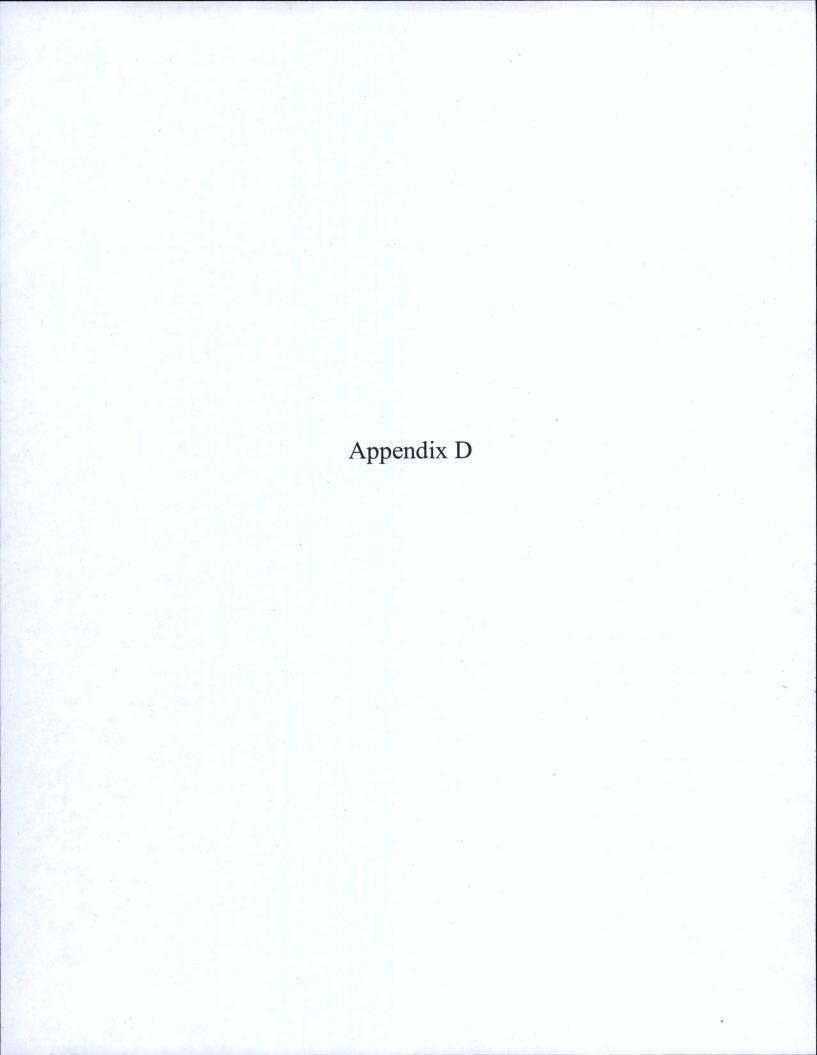
Wastes are not placed in contact with other incompatible wastes in the landfill as per IDAPA 58.01.05.012 and 58.01.05.008 (40 CFR §§270.21(g), 264.313). The identification and segregation of potentially incompatible wastes in the landfill is accomplished by the review of each waste stream in accordance with the WAP. Additional precautions to avoid mixing of incompatible wastes in landfills is provided by the waste locator system as described in paragraph D.6 of Section D.

# F.5.m Management of Ignitable or Reactive Wastes Placed in Land Treatment Units

Not Applicable. The facility does not have any land treatment units.

# F.5.n Management of Incompatible Wastes Placed in Land Treatment Units

Not Applicable. The facility does not have any land treatment units.



#### Waste Analysis Plan (WAP) Activities During the Interim Phase at US Ecology Idaho (USEI)

USEI is submitting this document with a description of WAP activities to be undertaken during the initial phase of return to operations at USEI's TSDF facility. USEI received IDEQ's comments to the initial email submission of updates to the WAP document. USEI has determined that changes to the WAP are not needed for the limited operations that will be undertaken at this time, and is offering this document to document and outline waste pre-acceptance tasks that will be performed to keep USEI operations in compliance with the WAP as operations resume. USEI has considered IDEQ's comments to the WAP in the preparation of this document.

USEI is requesting IDEQ approval to receive shipments of waste for direct disposal. The majority of the material will be bulk solids for direct landfill. Bulk sludges that pass the paint filter test are also included in this request. Bulk liquids that are non-hazardous or meet Land Disposal Restriction standards may be accepted for placement into the Evaporation Pond as well. USEI is also requesting IDEQ approval to direct landfill containerized wastes that are currently in storage at the facility. All material received during the interim phase will meet Land Disposal Restriction standards upon arrival at the facility and will not require treatment prior to disposal. No treatment activities will be performed during the interim phase of operations. The containerized wastes USEI is requesting to direct landfill meet LDR standards, were received and inspected prior to November 17, 2018, have been fingerprinted (if required), inbounded in USEI's tracking system, and are currently in permitted storage at the facility. USEI understands that IDEQ has prohibited direct landfill of any labpacked material at this time; direct landfill of lab packed wastes will not be performed during the interim period, but will proceed when treatment operations resume.

At this time USEI has the capability to perform all required inspections and fingerprinting that would be needed to accept waste for direct disposal in the site landfills or surface impoundments. Methods that will be used to determine waste acceptability include visual inspection of the waste to determine conformity to the provided waste description, paint filter test, water reactivity, pH, and a flame test to determine possible combustibility/flammability of the material, cyanide screen (if applicable), and sulfide screen (if applicable). Findings which indicate the wastes do not conform to the profiled description will be clarified with the customer. If the discrepancy cannot be clarified or the waste does not meet LDR, it will be rejected to the customer or generator facility or to an alternate facility indicated by the customer.

#### **Waste Pre-Acceptance**

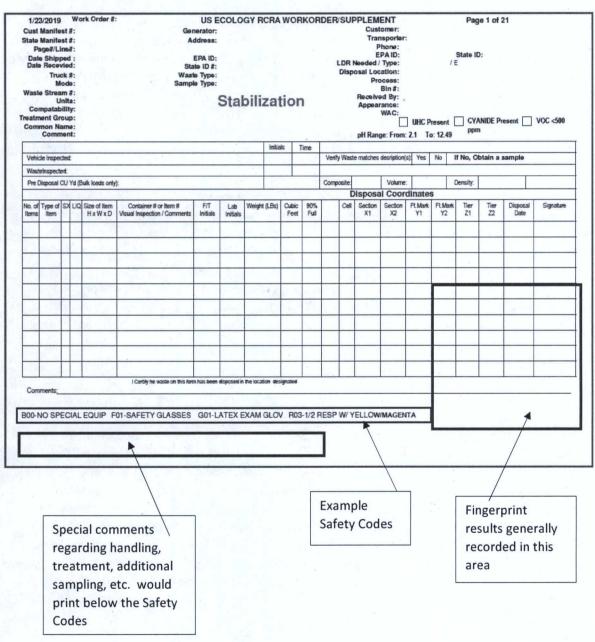
Waste pre-acceptance activities continue to be completed in accordance with Sections C.3 (Waste Acceptance Criteria) and C.6 (Pre-acceptance Procedures) of the facility WAP. Waste pre-acceptance activities will continue to utilize the established waste profiling process. The waste profile provides a description/characterization of the waste that is to be received. Waste profiles will continue to be reviewed by the Customer Service Representative (CSR), the Radiation Protection Specialist (RPS) (on an as-needed basis; the RPS only reviews profiles that have a radioactive component associated with them), Laboratory personnel, EHS department, and the Technical Manager, as they have been in the past. During the review process, any needed comments are added to the profile cover sheet. These comments are entered into the "Special Handling Comments" section of AESOP by the CSR once the review process is complete, and automatically print on the work order (WO) cover sheet that is provided to operations staff for documentation of activities related to the received waste. An LDR may also be

submitted during the pre-acceptance review process, though one is not required for approval. If an LDR is required, it will be submitted with the first load of material received; some wastes require an LDR be submitted each time the material is shipped to USEI. USEI tracks this requirement within the AESOP system. If an LDR is needed but is not provided, Customer Service will clarify with the customer. Waste may not be disposed until an LDR has been received.

#### **Incoming Waste Shipment Procedures**

For receipts of bulk waste, Section C.7 will be followed. Samples of incoming material are documented on the WO form by operations personnel. Laboratory personnel document results of any fingerprint analysis on the WO form as well. An example of a blank Work Order form is provided below. No additional tracking documents are utilized in the process.

Blank Work Order Form



When shipments of bulk material arrive onsite, trucks are directed to the scale. A "heavy weight" is recorded, shipping documents (Uniform Hazardous Waste Manifest, Bill of Lading, Non-Hazardous Waste Manifest, etc.) and LDR, if required, are submitted to the Receiving Office, and the truck proceeds to the sampling stand for inspection. Trucks of bulk solid are inspected at 100% and are sampled at the rate described in Section C.7.1.23 of the facility WAP. Every load of bulk liquid is inspected and sampled. All waste materials, whether regulated (RCRA, but meeting LDR) or non-hazardous are subjected to the same inspection and sampling criteria. All wastes received for disposal in the interim must meet land disposal restrictions.

#### **Supplemental Analysis**

If supplemental analysis is needed for any reason, USEI will ensure that samples are sent to a certified lab and that a QA/QC report is received with each set of analytical data. Wastes will not be deposited into the landfill or Evaporation Pond until results from the supplemental analysis, that satisfy the acceptance criteria, have been obtained.

# Attachment 6 Hazards Prevention Plan Table of Contents

F.4 Preventive Procedures, Structures, and Equipment	32
F.4.a Unloading Operations	3 <del>2</del>
F.4.a.(1) Bulk Solids Unloading	
F.4.a.(2) Bulk Liquid Unloading	3
F.4.a.(3) Containerized Waste Unloading Procedures	
F.4.a.(4) [Reserved]	
F.4.a.(5) [Reserved]	4
F.4.b Run-Off	54
F.4.c Water Supplies	5
F.4.d Equipment and Power Failure	5
F.4.e Personal Protection Equipment	5
F.4.f Decontamination Procedures	6
F.5 Prevention of Reaction of Ignitable, Reactive, and Incompatible Wastes	6
F.5.a Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Waste	6
F.5.b General Precautions for Handling Ignitable or Reactive Waste and Mixing of Incompatible	Waste7
F.5.c Management of Ignitable or Reactive Wastes in Containers	87
F.5.d Management of Incompatible Wastes in Containers	87
F.5.e Management of Ignitable or Reactive Wastes in Tank Systems	8
F.5.f Management of Incompatible Waste in Tank Systems	8
F.5.g Management of Ignitable or Reactive Wastes Placed in Waste Piles	8
F.5.h Management of Incompatible Wastes Placed in Waste Piles	98
F.5.i Management of Ignitable or Reactive Wastes Placed in Surface Impoundments	98
F.5.j Management of Incompatible Wastes Placed in Surface Impoundments	98
F.5.k Management of Ignitable or Reactive Wastes Placed in Landfills	9
F.5.I Management of Incompatible Wastes Placed in Landfills	9
F.5.m Management of Ignitable or Reactive Wastes Placed in Land Treatment Units	9

F.5.n Management of Incompatible Wastes Placed in Land Treatment Units	9
	•
F.4 Preventive Procedures, Structures, and Equipment	4
F.4.a Unloading Operations	2
F.4.a.(1) Bulk Solids Unloading	
F.4.a.(2) Bulk Liquid Unloading	2
F.4.a.(3) Containerized Waste Unloading Procedures	
F.4.a.(4) Unloading at Stabilization Facility	
F.4.a.(5) Unloading at Containment Building	3
F.4.b Run-Off	4
F.4.c Water Supplies	4
F.4.d Equipment and Power Failure	4
F.4.e Personal Protection Equipment	4
F.4.f Decontamination Procedures	5
F.5 Prevention of Reaction of Ignitable, Reactive, and Incompatible Wastes	5
F.5.a Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Waste	5
F.5.b General Precautions for Handling Ignitable or Reactive Waste and Mixing of Incompatible Wa	<u>ste</u> 6
F.5.c Management of Ignitable or Reactive Wastes in Containers	6
F.5.d Management of Incompatible Wastes in Containers	6
F.5.e Management of Ignitable or Reactive Wastes in Tank Systems	7
F.5.f Management of Incompatible Waste in Tank Systems	7
F.5.g Management of Ignitable or Reactive Wastes Placed in Waste Piles	7
F.5.h Management of Incompatible Wastes Placed in Waste Piles	7
F.5.i Management of Ignitable or Reactive Wastes Placed in Surface Impoundments	7
F.5.j Management of Incompatible Wastes Placed in Surface Impoundments	7
F.s., Management of incompatible wastes Flaced in Surface impoundments	
F.5.k Management of Ignitable or Reactive Wastes Placed in Landfills	8
F.5.I Management of Incompatible Wastes Placed in Landfills	8
F.5.m Management of Ignitable or Reactive Wastes Placed in Land Treatment Units	8
F.5.n Management of Incompatible Wastes Placed in Land Treatment Units	8

3

# F.4 Preventive Procedures, Structures, and Equipment

## F.4.a Unloading Operations

In accordance with IDAPA 58.01.05.012 (40 CFR §270.14(b)(8)(i)), unloading procedures for waste shipments utilize safe and environmentally-sound methods to process and dispose of waste material. The facility handles both containerized and bulk shipments of solid and liquid wastes. Therefore, each type of waste shipment is addressed separately.

#### F.4.a.(1) Bulk Solids Unloading

All bulk solids unloading operations are performed under the direction of facility personnel. All personnel involved in unloading operations are trained in the handling of hazardous materials and are required to wear appropriate safety equipment.

Upon entering the site, transportation vehicles normally proceed to the Truck Scale and then to the staging area. After inspection and acceptance, each vehicle is directed to its designated unloading area. When a transportation vehicle arrives at the unloading area, an employee typically assists the driver in positioning of the vehicle. This allows control of vehicle movement by facility personnel while the vehicle is on-site. Prior to unloading, wind conditions and waste material type are assessed to determine if dust control measures are appropriate. Bulk solids are unloaded at the appropriate waste management area.

#### F.4.a.(2) Bulk Liquid Unloading

After inspection, <u>compatibility testing</u>, and acceptance, each vehicle is directed to <u>its-the</u> designated unloading area at <u>either</u> the <u>tank storage</u>, surface impoundment, <u>or treatment unit</u>. Prior to off-loading of wastes into <u>tanks</u>, surface impoundments, <u>or treatment systems</u>, the compatibility of the new waste is determined in accordance with the procedures in the WAP.

All bulk unloading operations are performed under the direction of facility personnel. All personnel involved with unloading of bulk liquid wastes don the proper PPE prior to the off-loading of waste material. Each transportation vehicle is positioned in a stable manner prior to unloading. It is then grounded to reduce the possibility of static electrical discharge. For bulk liquid truck unloading operations, all hose and piping connections are secured and checked prior to unloading. If valves are involved in the unloading process, they are checked for proper operation. After all connections and valves are checked for proper operation and waste unloading begins. All connections between the transportation vehicle and the facility systems are monitored during the unloading process for any evidence of leakage or other possible problems.

When a waste material is to be stored in one of the tanks, the tank identification, quantity, and work order number of the waste is recorded in the operating records. When a waste material is transferred to the surface impoundment treatment/disposal system, the quantity and work order number of the waste is recorded in the operating records.

Several control procedures are utilized to provide for the proper bulk handling of multiple liquid materials. By following the WAP, established procedures are used to determine the chemical and physical characteristics of each waste so adequate information has been obtained for the proper and safe management of the waste. Individual waste streams are accepted and processed for management in specified units. These units are designated to service specific wastes so only compatible wastes are stored and/or treatedmanaged in the same unit. This batch method of operation minimizes the potential for mixing of incompatible waste materials. Batch operation also facilitates the safe operation of treatment units. Prior to introduction of a different waste compatibility type, compatibility is checked in accordance with Section C.3.26.5 of the facility WAP.

Liquid waste shipments that are not compatible with materials of construction of the management unit or with the materials currently stored in the management unit are evaluated for storage in a different unit at the facility. Wastes that are not compatible and are not suitable to be managed at another facility in the unit are rejected and either returned to the generator or shipped to an alternate facility.

#### F.4.a.(3) Containerized Waste Unloading Procedures

Upon arrival at When multiple numbers of drums are moved, they are placed on site transportation vehicles. USEI, container transportation vehicles normally proceed to the Truck Scale and then to a staging area for preparation for unloading. Each vehicle then proceeds to its designated unloading area under the direction of site personnel. Facility personnel in the unloading area are instructed with respect to proper PPE for use in handling the incoming waste material based on the Waste Profile Form (WPF) or Work Order as appropriate. All handling of containers at the facility is performed with the appropriate equipment. When individual drums are transported from one area of the facility to another, a bobcat, drum dolly, or other appropriate piece of drum handling equipment is utilized. When multiple drums on wooden pallets are moved or staged in another area, a front-end loader, forklift or other appropriate equipment is used.

If an incoming transportation vehicle is carrying containerized waste that is to be placed into a CMU, the vehicle proceeds under the direction of facility personnel. The vehicle is positioned on a stable unloading area and all containers are removed from the vehicle with appropriate container handling equipment.

Each incoming container is visually inspected for integrity and to verify that labeling and marking are complete with respect to container identity. Containers that do not conform to these guidelines are designated for further processing and identification and/or repackaging, if necessary. Containers that cannot be identified or whose discrepancies cannot be resolved are either re-characterized, returned to the generator, or sent to an alternate facility.

Upon acceptance at<u>movement to</u> the staging/storage facility, individual containers may be placed on pallets, as needed. Prior to initiating work in the storage area, all personnel don the appropriate PPE. If the material is ignitable or reactive, appropriate precautions are taken as detailed in paragraph F.5.

#### F.4.a.(4) Unloading at Stabilization Facility[Reserved]

Waste determined to be suitable for stabilization may be forwarded directly to the Stabilization Facility. Laboratory stabilization testing is performed in accordance with the facility WAP. During this analysis and testing, those wastes found to be incompatible or detrimentally reactive with the stabilization treatment process are identified for further segregated handling and/or treatment. Each waste to be stabilized is evaluated in accordance with the facility WAP to evaluate treatability and handling requirements. After the determination of acceptability, the waste transport vehicle is directed by facility personnel to the proper unloading location.

Procedures set forth in paragraphs F.4.a.(1) and F.4.a.(2) are also followed when the waste arrives at the Stabilization Facility.

#### F.4.a.(5) Unloading at Containment Building [Reserved]

Incoming wastes are evaluated for compatibility with existing waste in the sort floors or mixing bins in accordance with the procedures of the facility WAP. If necessary, the laboratory performs a compatibility test (in accordance with the WAP) prior to waste mixing.

5

General procedures for unloading bulk solids, as described in paragraph F.4.a.(1), are followed in these areas. General procedures for unloading bulk liquids, as described in paragraph F.4.a.(2), are followed in the Containment Building. Containment Building components and systems are in place to prevent fugitive emissions during unloading operations as described in Section D.

#### F.4.b Run-Off

Site drainage and run-off controls are designed to convey and control rainfall from a 25-year, 24-hour precipitation event. Active waste disposal, storage, and treatment operations are segregated from stormwater by a series of berms, interceptor channels, engineered grades, and collection ponds.

Rainwater from within the perimeter road is impounded or directed to Collection Pond #1 or 3 by interceptor channels and engineered grades.

Rainwater from outside the perimeter road is directed off-site by grade, interceptor channels, and berming. The perimeter road berms generally prevent run-on to the facility.

Appendix D.4.7 contains further discussion on run-on/run-off control.

## F.4.c Water Supplies

To the best of USEI's knowledge, there are no domestic groundwater drinking water sources within 3,000 feet of the facility. The run-on and run-off control systems and the waste handling operations have been designed to prevent the contamination of either domestic groundwater drinking supplies or surface-water supplies. All treatment and disposal activities take place in areas that are sloped and graded to prevent uncontaminated off-site water from entering the site, as well as to prevent run-off from leaving the facility.

## F.4.d Equipment and Power Failure

In the event of a power outage, certain site processes are shut down. However, operations which do not require electrical power can usually continue unimpeded. Portable lighting is used, if necessary, to provide safe working conditions. Mobile radios are battery powered to provide uninterrupted communications. Radios are switched to Channel 2 or TA (for radios with a keypad) if the power is interrupted or the radio transponder becomes inoperable for some other reason. All of the facility emergency evacuation alarm systems, except the CD siren, are battery operated and do not depend on normal electrical service. Air horns for emergency signaling are also available in the event of a facility evacuation. power outage.

Ventilation systems in the Containment Building (Debris & Stabilization portions) are required to be in operation for certain waste (e.g., fine waste) management activities. In the Containment Building, the size reduction system (e.g., crusher, etc.), sort floors, and general building ventilation are serviced by separate ventilation systems. Therefore, failure of one system does not affect the operations in other areas. If all ventilation is off-line and an emergency situation occurs, then procedures in the Contingency Plan should be followed as applicable. Functionality of the ventilation system does not typically require implementation of the Contingency Plan if there is not release or threat of a release to human health or the environment.

# F.4.e Personal Protection Equipment

Personal protective equipment (PPE) is issued to individual employees to provide protection beyond that afforded by the engineered safety controls described throughout this  $\underline{d}$ -Document. This PPE may include the following:

- Respirator Protection
- Foot Protection
- Head Protection
- Eye Protection
- Hand Protection
- · Coveralls, Tyvek, and chemical resistant outer coverings

Facility personnel are trained in the appropriate use of PPE for each individual working area and condition. Special requirements for specific waste streams are designated by the Health & Safety Manager or are listed on the WPF and/or the Work Order as discussed in applicable sections of the facility WAP. Facility personnel are fit tested for respirators and instructed regarding the use of applicable safety equipment. If an employee notices a defect, it is their responsibility to request replacement of the defective equipment. If any employee determines a particular task does not comply with safe operating practices, it is their responsibility to notify their supervisor of the task in question. To facilitate this process, all employees are trained in the safe operating practices to be used in handling hazardous materials.

#### F.4.f Decontamination Procedures

A vehicle wash station is provided for washing/decontaminating equipment. This unit is also used to spray vehicles that traverse the landfill or other designated waste handling areas. This system is used to avoid tracking material off-site.

Personnel are instructed to clean waste handling equipment in designated areas prior to exiting designated portions of the facility.

A two-step decontamination system is utilized in the Containment Building to prevent the spreading of waste to other locations. An initial gross decontamination of personnel and equipment is conducted inside the Containment Building. If necessary, further decontamination of personnel and equipment are accomplished at the boot wash area and the vehicle wash station, respectively.

# F.5 Prevention of Reaction of Ignitable, Reactive, and Incompatible Wastes

The processing, storage, treatment, and disposal of ignitable, reactive and incompatible wastes pose various handling problems. USEI makes every effort to prevent any reaction involving ignitable and reactive waste and to minimize the opportunities for the mixing of incompatible wastes.

# F.5.a Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Waste

In accordance with IDAPA 58.01.05.012 and 58.01.05.008 and [40 CFR §§270.14(b)(9) and 264.17], and prior to handling ignitable material, USEI makes every effort to eliminate any potential situation which could cause an ignition of reactive or ignitable waste.

Prior to handling any reactive or ignitable waste, personnel will survey the immediate work area for any sources of ignition, open flame, or any other potential problems which may lead to a possible uncontrolled event. These sources include, but are not limited to, open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks, spontaneous ignition and radiant heat. These sources are removed from the work area. If handling equipment is used, only equipment that is compatible with the material is used. Transportation vehicles are turned off and secured to prevent movement, and tankers are grounded to prevent static discharges. Each work station is equipped with the appropriate fire-fighting equipment to

handle minor incidents. Smoking is not permitted in any waste handling area. A "No Smoking" sign is clearly posted at the entrance of the active yard area. Personnel can contact the area supervisor by two-way radio or other means in the event of an uncontrolled event. These and other emergency equipment maintained on-site are described in detail in the Contingency Plan.

# F.5.b General Precautions for Handling Ignitable or Reactive Waste and Mixing of Incompatible Waste

Every effort is made to minimize the potential for adverse reactive situations at the facility. Incompatible waste categories are handled separately at a given unit/sub-unit. All materials handling and processing equipment are decontaminated, as necessary, following activities with each waste category. Decontamination procedures for each change of waste category handling are determined by operations supervisors. Incompatible wastes are segregated by compatibility group via physical separation (barriers, berms, or dikes). Batch treatment techniques for individual categories of wastes (one compatibility group at a time) are utilized to minimize the adverse effects that may result from processing incompatible, reactive, or ignitable waste streams. Interim Processing Loads in the landfill will be inspected for proper cover, containment, marking, time constraints, and waste limitations as described in Section D.6.t.(2)(d).

Incompatible wastes are not stored together in containers or placed in contact with each other in surface impoundments or landfills at the facility. Wastes are tested or evaluated using the waste characterization/acceptance process for compatibility (as described in the WAP) prior to acceptance of the material at the facility. Individual waste shipments with uncertain properties are sampled and tested for compatibility prior to contact with other wastes or equipment. EPA-600/2-80-076, "A Method for Determining the Compatibility of Hazardous Wastes," was used as a guideline in developing compatibility categories for the management and processing of hazardous wastes. The criteria used for developing these categories were established to avoid producing a potentially dangerous situation. Hence, wastes are segregated from other incompatible wastes that, when contacted, could result in an adverse reaction, including any of the following:

- Generation of extreme heat or pressure, fire or explosions, or violent reactions.
- Production of uncontrolled flammable fumes, dusts or gases in sufficient quantities to threaten human health or the environment.
- Production of uncontrollable flammable fumes or gases in sufficient quantities to pose a risk of fire or explosion.
- Damage to the structural integrity of the device or facility.
- · Creation of a threat to human health or the environment.

Segregation of potentially incompatible wastes in the landfill is facilitated by facility review of each waste stream (per requirements of the facility WAP) and utilization of the Work Order. When wastes are received and fingerprinted, the chemist will note on the Work Order any considerations of incompatibility. Conditions of incompatibility are not a concern where wastes have been treated to meet LDR standards. These wastes are in a physical state in which no adverse reactions will occur when the material is placed into the landfill. However, USEI also receives non-regulated materials for direct disposal (i.e. solid corrosives) that may be incompatible. To meet the requirements of 40 CFR §264.17(b) within the landfill cells, materials that may pose a potential for adverse reactions are segregated within separate subcells within the landfill. To create the subcell, any potentially incompatible materials are placed at least three (3) feet away from other materials. The space between materials is then filled with Group E material or clean fill. Group E or clean fill is packed around each container to create a totally separate and segregated area for these wastes within the landfill cell. If Group E material is used as fill material it must be inert and non-hazardous soil meeting LDR. Confirmation screening will be performed to verify that the fill soil is not flammable, combustible, or reactive prior to use as fill.

## F.5.c Management of Ignitable or Reactive Wastes in Containers

Prior to acceptance of any wastes, USEI uses the management system described in the facility WAP to determine the status for acceptance or rejection or acceptance of materials for disposal on-site. This system is designed to provide USEI the necessary precautions to avoid accepting ignitable, reactive, or incompatible wastes.

Any ignitable or reactive wastes are stored in segregated areas and comply with the requirements of 40 CFR §264.17(c). Paragraph D.1 of Section D identifies the locations of the waste management areas and processing areas. Per IDAPA 58.01.05.008 and 58.01.05.012 (40 CFR §§270.15(c) and 264.176), no ignitable wastes are stored or treated within 15 meters of the property line.

## F.5.d Management of Incompatible Wastes in Containers

As pursuant to IDAPA 58.01.05.008 and 58.01.05.012 (40 CFR §§264.177, 270.15(d)), tThe mixing of incompatible wastes in containers is not permitted unless §264.17(b) is complied withat USEI at this time. In accordance with the applicable section of the facility WAP, each waste entering the facility is tested and its destination noted on the Work Order. All containerized waste is separated from other incompatible waste via physical separation barriers (e.g., dikes, berms, or walls). Any waste container that is reused for future waste handling purposes is properly cleaned prior to reuse.

Bulk or containerized waste is-was previously stored within the Containment Building in designated areas. Segregation of incompatible wastes is-was maintained during storage and/or staging for processing. Only one compatibility group at a time is-was processed in each sort floor and mixing bin area. When waste spills occured, the spill material is-was collected, removed, and the area appropriately cleaned prior to any staging and/or processing of incompatible waste within theis area. No additional waste containers will be placed into storage at the Containment Building until the building is reconstructed.

# F.5.e Management of Ignitable or Reactive Wastes in Tank Systems

Not Applicable. The facility manages ignitable and reactive wastes per the requirements of Section C.6.4 of the facility WAP.

# F.5.f Management of Incompatible Waste in Tank Systems

Prior to the addition of a new <u>site-generated</u> waste stream into a tank, a waste to waste compatibility test is performed as required by the applicable sections of the facility WAP. If an incompatibility is determined, the new waste stream is not accepted into that tank as per IDAPA 58.01.05.012 and 58.01.05.008 (40 CFR §§264.199, 270.16(j)) unless §264.17(b) is complied with.

When an empty tank is designated to hold a compatibility group different than it previously held, appropriate cleaning and/or evaluation is performed before introducing any of the new compatibility group waste into the vessel. Cleaning procedures may include washing the inside of tanks and collecting the wash solution. These wash solutions may be treated as hazardous wastes if they exhibit a hazardous waste characteristic. The tanks are washed and/or emptied sufficiently so that when added to the tank, the new waste does not react with the waste wash water. Tests may be run on the wash water to verify adequate tank cleaning, to determine the degree of hazard and/or to determine disposition.

# F.5.g Management of Ignitable or Reactive Wastes Placed in Waste Piles

Not Applicable. The facility does not have any waste piles.

## F.5.h Management of Incompatible Wastes Placed in Waste Piles

Not Applicable. The facility does not have any waste piles.

# F.5.i Management of Ignitable or Reactive Wastes Placed in Surface Impoundments

Not Applicable. The facility does not accept ignitable or reactive wastes for management in surface impoundments.

# F.5.j Management of Incompatible Wastes Placed in Surface Impoundments

Material designated for disposal in a surface impoundment is tested for compatibility with the material already in the unit, as required by the facility WAP. If, through testing, the wastes in question are determined to be incompatible and would result in generation of heat or fire, production of toxic or flammable emissions, damage to the unit's structural integrity, or threaten human health or the environment, the new material is not introduced into the surface impoundment as per IDAPA 58.01.05.012 and 58.01.05.008 (40 CFR 270.17(h), §§ 264.229) unless §264.17(b) is complied with.

## F.5.k Management of Ignitable or Reactive Wastes Placed in Landfills

The facility does not accept air and highly water reactive wastes for direct placement in the landfill as described in the facility WAP. In accordance with the WAP and per IDAPA 58.01.05.012 and 58.01.05.008 (40 CFR §§270.21(f), 264.312), no ignitable or reactive hazardous waste is placed in a landfill unless it is treated or otherwise rendered non-ignitable or non-reactive. All incoming hazardous wastes are properly characterized and, if stabilization or treatment is required prior to placement in a landfill, special instructions are placed on the Work Order to clearly state the process to be followed.

# F.5.I Management of Incompatible Wastes Placed in Landfills

Wastes are not placed in contact with other incompatible wastes in the landfill as per IDAPA 58.01.05.012 and 58.01.05.008 (40 CFR §§270.21(g), 264.313). The identification and segregation of potentially incompatible wastes in the landfill is accomplished by the review of each waste stream in accordance with the WAP. Additional precautions to avoid mixing of incompatible wastes in landfills is provided by the waste locator system as described in paragraph D.6 of Section D.

# F.5.m Management of Ignitable or Reactive Wastes Placed in Land Treatment Units

Not Applicable. The facility does not have any land treatment units.

# F.5.n Management of Incompatible Wastes Placed in Land Treatment Units

Not Applicable. The facility does not have any land treatment units.

#### Waste Analysis Plan (WAP) Activities During the Interim Phase at US Ecology Idaho (USEI)

USEI is submitting this document with a description of WAP activities to be undertaken during the initial phase of return to operations at USEI's TSDF facility. USEI received IDEQ's comments to the initial email submission of updates to the WAP document. USEI has determined that changes to the WAP are not needed for the limited operations that will be undertaken at this time, and is offering this document to document and outline waste pre-acceptance tasks that will be performed to keep USEI operations in compliance with the WAP as operations resume. USEI has considered IDEQ's comments to the WAP in the preparation of this document.

USEI is requesting IDEQ approval to receive shipments of waste for direct disposal. The majority of the material will be bulk solids for direct landfill. Bulk sludges that pass the paint filter test are also included in this request. Bulk liquids that are non-hazardous or meet Land Disposal Restriction standards may be accepted for placement into the Evaporation Pond as well. USEI is also requesting IDEQ approval to direct landfill containerized wastes that are currently in storage at the facility. All material received during the interim phase will meet Land Disposal Restriction standards upon arrival at the facility and will not require treatment prior to disposal. No treatment activities will be performed during the interim phase of operations. The containerized wastes USEI is requesting to direct landfill meet LDR standards, were received and inspected prior to November 17, 2018, have been fingerprinted (if required), inbounded in USEI's tracking system, and are currently in permitted storage at the facility. USEI understands that IDEQ has prohibited direct landfill of any labpacked material at this time; direct landfill of lab packed wastes will not be performed during the interim period, but will proceed when treatment operations resume.

At this time USEI has the capability to perform all required inspections and fingerprinting that would be needed to accept waste for direct disposal in the site landfills or surface impoundments. Methods that will be used to determine waste acceptability include visual inspection of the waste to determine conformity to the provided waste description, paint filter test, water reactivity, pH, and a flame test to determine possible combustibility/flammability of the material, cyanide screen (if applicable), and sulfide screen (if applicable). Findings which indicate the wastes do not conform to the profiled description will be clarified with the customer. If the discrepancy cannot be clarified or the waste does not meet LDR, it will be rejected to the customer or generator facility or to an alternate facility indicated by the customer.

#### **Waste Pre-Acceptance**

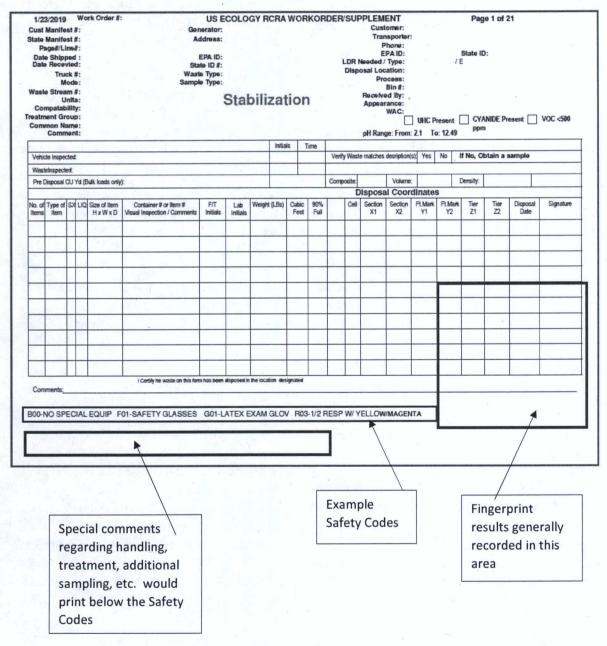
Waste pre-acceptance activities continue to be completed in accordance with Sections C.3 (Waste Acceptance Criteria) and C.6 (Pre-acceptance Procedures) of the facility WAP. Waste pre-acceptance activities will continue to utilize the established waste profiling process. The waste profile provides a description/characterization of the waste that is to be received. Waste profiles will continue to be reviewed by the Customer Service Representative (CSR), the Radiation Protection Specialist (RPS) (on an as-needed basis; the RPS only reviews profiles that have a radioactive component associated with them), Laboratory personnel, EHS department, and the Technical Manager, as they have been in the past. During the review process, any needed comments are added to the profile cover sheet. These comments are entered into the "Special Handling Comments" section of AESOP by the CSR once the review process is complete, and automatically print on the work order (WO) cover sheet that is provided to operations staff for documentation of activities related to the received waste. An LDR may also be

submitted during the pre-acceptance review process, though one is not required for approval. If an LDR is required, it will be submitted with the first load of material received; some wastes require an LDR be submitted each time the material is shipped to USEI. USEI tracks this requirement within the AESOP system. If an LDR is needed but is not provided, Customer Service will clarify with the customer. Waste may not be disposed until an LDR has been received.

#### **Incoming Waste Shipment Procedures**

For receipts of bulk waste, Section C.7 will be followed. Samples of incoming material are documented on the WO form by operations personnel. Laboratory personnel document results of any fingerprint analysis on the WO form as well. An example of a blank Work Order form is provided below. No additional tracking documents are utilized in the process.

Blank Work Order Form



When shipments of bulk material arrive onsite, trucks are directed to the scale. A "heavy weight" is recorded, shipping documents (Uniform Hazardous Waste Manifest, Bill of Lading, Non-Hazardous Waste Manifest, etc.) and LDR, if required, are submitted to the Receiving Office, and the truck proceeds to the sampling stand for inspection. Trucks of bulk solid are inspected at 100% and are sampled at the rate described in Section C.7.1.23 of the facility WAP. Every load of bulk liquid is inspected and sampled. All waste materials, whether regulated (RCRA, but meeting LDR) or non-hazardous are subjected to the same inspection and sampling criteria. All wastes received for disposal in the interim must meet land disposal restrictions.

#### **Supplemental Analysis**

If supplemental analysis is needed for any reason, USEI will ensure that samples are sent to a certified lab and that a QA/QC report is received with each set of analytical data. Wastes will not be deposited into the landfill or Evaporation Pond until results from the supplemental analysis, that satisfy the acceptance criteria, have been obtained.